

Technological University Dublin CoARA Action Plan

1. Introduction

Technological University Dublin (TU Dublin) is Ireland's first technological university. It was established in January 2019 when our founding Institutes of Technology (Dublin Institute of Technology, Institute of Technology Blanchardstown, and the Institute of Technology Tallaght) joined together to seek designation as a technological university. It is a new and inspiring university where the arts, sciences, business, engineering, and technology converge, and it offers education and training programmes from apprenticeship to doctoral degree.

TU Dublin is a place where fundamental research and new theoretical concepts are nurtured and supported so the findings can translate into novel technologies, practices, and policies for the benefit of learning, society, business, and industry.

Our approach is to continually adapt and expand our activities to reflect an evolving society and the wider environment, and we see the initiatives below as key to our success in that regard:

- We have ambitious targets centred around *People, Planet and Partnership* as set out in our <u>Strategic Intent 2030</u> and all our activities are underpinned by the UN Sustainable Development Goals.
- By signing the <u>Magna Charta Universitatum</u> in November 2022 we demonstrated our commitment to being responsive, responsible, and reliable partners for serving society, businesses, and other stakeholders; and to be proactive participants in addressing global and societal challenges.
- TU Dublin led out a transformational initiative where Ireland's five technological universities
 (TUs) established TU-NET to advance excellence in Open Research. Launched in April 2023,
 TU-NET has published a <u>Joint Statement on Open Research</u>, and has developed a <u>shared</u>
 open access repository, making our research visible nationally and globally.
- We signed up to the Coalition on Advancing Research Assessment (CoARA) in April 2023, committing to developing an Action Plan for implementation of the 10 CoARA principles with a further commitment to share this plan publicly.
- The TU Act sets ambitious 10-year targets to boost research activity and capability. TU Dublin
 recently published its first <u>Research & Innovation Strategy 2023-28</u> outlining its plans to
 increase the volume and impact of research and innovation and move toward achieving these
 targets.

¹ https://hea.ie/policy/he-reform/technological-universities/





2. Evolution of the University System in Ireland

Before the 1970s, Irish higher education was dominated by five universities with roots dating back to the 19th century or earlier. As Ireland's economy shifted in the 1970s from agriculture to an enterprise model driven by foreign investment, the demand for technically skilled workers led to the establishment of National Institutes of Education and Regional Technical Colleges. The ICT boom of the 1980s and the rise of the "information society" saw these institutes evolve into universities. By 2000, Regional Technical Colleges were renamed Institutes of Technology, reflecting their role in developing new programs in high-demand skill areas, often in partnership with industry, and research that benefited the nation's enterprises and regions.

A 2004 OECD review of higher education in Ireland spurred further transformation. The publication of Impact 2030: Ireland's Research and Innovation Strategy recognized the review's findings and established Ireland's goal to create a more diverse higher education system focused on collaboration, upskilling, and widening access. The Technological Universities Act (2018) – through the merging of the IoTs into larger institutions - marked a significant step in this direction by enabling the creation of technological universities as a new feature of Ireland's higher education landscape.

While still in their infancy, Technological Universities (TUs) aim to enhance the quality and impact of higher education, particularly in the regions they serve. They focus on developing vocational and professional programs that support economic development, increasing research capacity in applied areas, and providing a more diverse, flexible education system aligned with Ireland's evolving economic needs. TUs have a distinct pedagogical and research focus, emphasising a practice-based approach.

3. The Research Environment in TU Dublin

TU Dublin, through its founding institutions, has a proud heritage of generating important scientific insights, prototyping, and launching novel technologies and companies, influencing policy, and reflecting on and contributing to the creative life of Ireland. Whilst research and innovation activity grew organically over this period, it accelerated significantly in the early 2000s, with the first large scale investments in research infrastructure through the Programme for Research in Third Level Institutions (PRTLI). PRTLI allowed the TU Dublin founding institutions develop dedicated research infrastructure, facilitating the creation of Research Institutes.

These have now transformed into significant infrastructural platforms, or 'Research Hubs.' TU Dublin Research Hubs bring together researchers within broadly complementary fields of activity, encouraging, and actively supporting collaboration between individual researchers and between Research Centres and Groups located in the Academic Schools, with the goal of building critical mass in distinctive fields of enquiry.





TU Dublin has leveraged research investments to great effect — our community now comprises 1,000+ researchers and innovators. This community is engaged in the generation of excellent and impactful research outputs and outcomes, which help ensure that the university plays a vital role in Ireland's economic, civic, and cultural evolution, whilst also making a significant contribution to international knowledge and enhancing Dublin's role as Ireland's global gateway.

In our pursuit of excellence in the conduct of our research and innovation activity we have adopted the following principles:



The university, through the support of its Research and Innovation Services, supports its researchers and innovators in planning and delivering on research projects, knowledge transfer, and public engagement initiatives. It has put in place structures to enhance the visibility and reach of our outputs, such as publications and intellectual property, and to effectively communicate research findings to different audiences, by making them openly available.

TU Dublin is an 'open first' university and was the first university in Ireland to have an open access digital repository, <u>ARROW</u>, and the first Irish university to establish a dedicated Open Research Support Unit whose objective is to make the intellectual output of the university free to access on a global platform.





4. Advancing Research Assessment

As a new form of university in Ireland, the TU sector does not yet have a formal research assessment system in place.

Research performance is measured by the Higher Education Authority on an annual basis. Evaluation of the quality of research currently takes place as part of an overall institutional review process undertaken by QQI every 7 years, with the first iteration for the University taking place in 2021 (Cinnte Review).

Carefully designed research assessment practices are key to making fair decisions on the quality and potential impact of research findings, for building strategic partnerships and collaborations and aiding career progression. Given our commitment to the 10 CoARA principles, we support the establishment of research assessment practices that are based on qualitative peer review, supported by the responsible use of quantitative indicators when appropriate.

By joining CoARA, TU Dublin has formalised its commitment to developing a research assessment framework to recognise the diverse outputs, practices and activities that maximise the quality and impact of our research.

5. Approach to Implementing CoARA

As signatories of the CoARA Agreement, we agree on the need for an inclusive and responsible practice of research assessment to validate the quality of our research. It will establish a common direction for research reform practices within the university.

We will work together with other higher education institutions through the Irish National CoARA Chapter, to enable a systemic framework based on the 10 CoARA principles. We recognise that additional resources will be essential as we move to a formal assessment process and the ultimate success of the implementation of the plan will be determined by the availability of such resources.

In the first instance, we need to reflect on how and what we wish to assess and then build a research assessment framework and validate it. We will establish a Working Group dedicated to developing a Responsible Research Assessment Framework and implementation plan. To develop greater literacy and competencies in responsible research assessment across the university, training and development will be incorporated into the Responsible Research Assessment Framework. The framework will include designing assessment criteria and processes that emphasise quality, impact, diversity, inclusiveness, and collaboration.





5.1. Completed Actions post-CoARA Agreement

Several actions have been delivered within the first 12 months since signing up to the Agreement:

- Publication of the <u>TU Dublin Research & Innovation Strategy 2023-28</u> defining five key thematic priorities where we currently have international recognition in carrying out high quality and impactful research.
- Establishment of the Research and Innovation Awards recognising the achievements of our researchers and innovators.
- Establishment of Research Hubs within the Research and Innovation Services to lead the
 definition, establishment and promotion of a collaborative, supportive and stimulating
 research culture that actively promotes and supports cross-disciplinary collaboration.
- Call to establish designated research centres in TU Dublin launched May 2024, with inbuilt assessment and review processes.
- HRS4R Accreditation with an accompanying Action Plan to improve our researcher HR processes.
- Deployment of a new research information management system, PURE, enabling improved tracking of a broad range of activities across the institution.
- Establishment of an Open Research Support Unit within the Research Support Services, a
 collaborative unit with Library Services, supporting the 'open first' ambitions of the
 university,
- Establishment of the Research Career Development team integrated into the People
 Development Service, with a working group made up of personnel from R&I and Library
 Services to augment supports for early career researchers and new staff.
- Establishment of the Research Engagement & Impact team within the Research and Innovation Services to lead out on the development of engagement and impact frameworks, support engaged research and develop a research assessment framework.
- Expansion of the Library Research Services, including a Head of Research Services, Data Librarian, Open Scholarship Librarian, Research Indicators Librarian and Research Support Librarian.
- Development of (Open) Research training and advisory services to support a diverse range of activities, e.g, Research Data Management Data Management Planning and Data Publishing, Narrative CV writing, Open Access Publishing and Predatory Publishing, Introduction to Open Research, GDPR in an Open Research Environment, Responsible Use of AI in Research, Search Strategy and Literature Review.



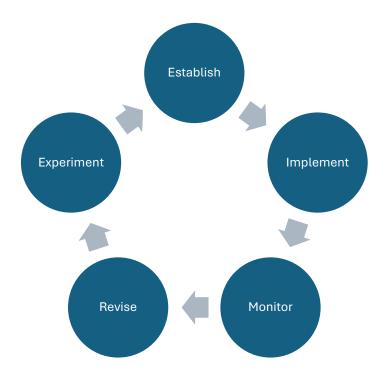


5.2 Technological University Dublin Action Plan

Considering the intricate operational landscape outlined previously, along with the various contingencies and stakeholders, encompassing both institutional and national entities, TU Dublin has crafted its action plan as a network of interconnected strands, rather than a straightforward linear progression.

Acknowledging the differing levels of complexity among actions, we embrace this multi-stranded approach to sustain progress across various fronts, avoiding excessive reliance on a strictly linear timeline.

The five strands are as follows:







1. Establish

This standalone phase of our CoARA Action Plan provides for the establishment of the structures and supports necessary for delivering on our commitments under the Agreement.

Action	Description	Responsible	Indicative Timeline
Establish a Responsible Research	Chaired by the Head of Research Engagement & Impact, this	R&I Academy, ² Head of R&I	September 2024
Assessment Working (RRA) Group	working group will comprise of diverse representatives from	Engagement & Impact	
	across the organisation and will aim to determine our		
	internal philosophy as a university as we set about		
	implementing the CoARA principles and to develop a		
	Responsible Research Assessment Framework over the three		
	years of the Action Plan		
Document our Current State	Develop a landscape analysis of current activities in TU	RRA Working Group	December 2024
	Dublin as they relate to research assessment and our		
	commitments under CoARA		
Review this Action Plan & Deliver	Review and revise this initial Action Plan based on the	RRA Working Group, Head	Q2 2025
Version 2	completed landscape analysis	of R&I Engagement &	
		Impact	
Work with other Technological	Work with our TU partners to develop a common approach	VP R&I, Head of Research,	From Q2 2025
Universities to guide the delivery	to creating a Responsible Research Assessment Framework	Open Research Support	
of a TU-wide Research	for our sector	Unit	
Assessment system			

² The TU Dublin R&I Academy is a 30 member university body drawn from the university research community, which is chaired by the Vice President for Research and Innovation. It is responsible for translating the institutional vision and strategy into a University Research and Innovation strategy, and for guiding the implementation of this strategy.





Engagement with the Irish	Retain a designated nominee on the CoARA National Chapter	VP R&I, Open Research	Ongoing
National CoARA Chapter	and ensure alignment with national approach	Support Unit	
Consider Publishing an INORMS	Develop and publish a statement of intent regarding	VP R&I, R&I Academy	December 2025
More Than Our Ranking	assessment beyond ranking criteria		
Statement			

2. Implement

This phase will run across the full three years of the Action Plan, developing and implementing the supports needed to deliver on our commitments under CoARA. While the detailed actions of this strand will be further developed in Version 2 of this action plan, the following actions are envisaged.

Action	Description	Responsible	Indicative Timeline
Publish a Responsible Research	Over the lifetime of the Action Plan, develop and publish a	VP R&I, Head of R&I	Q3 2025
Assessment Framework	co-designed and endorsed RRA Framework with a plan for implementation	Engagement & Impact	
Develop CoARA aligned accreditation structures for Research Centres	Develop accreditation criteria for Research Centres which are transparent, and issue a call for accreditation	VP R&I, Head of R&I Engagement & Impact	July 2026
Publish a new iteration of our Early Career Researcher Development Framework	Co-create and publish a framework for ECR Development aligned with the responsible research assessment framework and CoARA principles	VP R&I, R&I Academy and People Development ³	July 2027
Establish Data Stewardship Services	Develop a business case and apply for university funding to the recruit a Data Stewardship Coordinator to review and oversee development of services, including conducting a	Open Research Support Unit	December 2024

³ As part of the Human Resources function, the People Development team assist in the development of knowledge, skills and behaviours of all TU Dublin staff.





	landscape and gap analysis of current skills and		
	infrastructures		
Publish an Open Research	Review and formalise Open Research Practices in TU Dublin	Open Research Support	Q2 2026
Framework	through the publication of an OR framework	Unit	
Expansion of Researcher Training	Review, develop and expand researcher training programmes	People Development, R&I,	Ongoing
Programmes	in line with our CoARA commitments	Library Services	

3. Monitor

The 'Monitor' phase of our Action Plan will work across two phases. We will develop structures to effectively monitor the breadth and diversity of our research outputs, enabling assessment across a broad range of criteria, while also looking outwards to the broader CoARA community for guidance and to ensure ongoing alignment.

Action	Description	Responsible	Indicative Timeline
Implement Data Management	Implement ARGOS, an EOSC-compliant, open source DMP	Open Research Support	June 2025
Planning Software, ARGOS	planning system across the university, linking to other systems and providing oversight of data outputs across the university. Further linking this system to the NOAM and PURE systems.	Unit & Library Services	
Active engagement with the	Establish a data quality pathway to ensure the quality and	Open Research Support	Ongoing
National Open Access Monitor	transparency of TU Dublin data in the National Open Access Monitor	Unit & Library Services	
Development of PURE	Maintain, develop and expand of PURE across the R&I	R&I Common Services Unit	Ongoing
	landscape at TU Dublin, presenting a 'farm to fork' solution		
	to research-related data, enabling transparency and fair		
	assessment of a variety of skills, tasks and outputs		





Development & Implementation	Develop a timeline and procedure for reviewing the	VP R&I, Head of Research	Q1 2026
of Action Plan Review Path	commitments and actions in this Action Plan to monitor	Engagement and Impact,	
	ongoing developments	R&I Academy	
Engagement with the Irish	Retain a designated nominee on the CoARA National Chapter	VP R&I, Open Research	Ongoing
National CoARA Chapter	and monitor approaches across all Irish signatories, using	Support Unit	
	this avenue too for engagement at an international level		

4. Revise

Aligning closely with the 'Monitor' phase of our Action Plan, TU Dublin commits to reviewing and iterating over the 3-year lifecycle of the Action Plan, based on feedback institutionally, and national engagement.

Action	Description	Responsible	Indicative Timeline
Development a robust feedback	Aligning with the commitment to develop a Research	VP R&I, Head of Research	Q2 2026
mechanism for our research	Assessment Framework, a feedback mechanism for revision	Engagement and Impact,	
community in relation to research	of the Framework will be developed	R&I Academy	
assessment			
Development and	Develop a timeline and procedure for reviewing the	VP R&I, R&I Academy,	December 2026
Implementation of Action Plan	commitments and actions in this Action Plan to monitor		
Review Path	ongoing developments and make revisions as appropriate		
Engagement with the Irish	Seek insight and review from colleagues in other universities	VP R&I, Open Research	Ongoing
National CoARA Chapter	on our activities over the three years of the Action Plan	Support Unit	





5. Experiment

As an institution we commit to trying new things and being open to change, to innovation and to opportunity. Linking to our 'Monitor' and 'Revise' strands, we will review, adjust, and restructure our work under our commitments as needed.

Action	Description	Responsible	Indicative Timeline
Pilot new ways of showcasing our	Investigate how we can better showcase the diversity of our	Open Research Support	Start Q4 2024 -
research activities	research activities, e.g. case studies, open educational	Unit, Research Impact	ongoing
	resources, pilot on showcasing Fine Art materials on Arrow	Lead, Library Services	
Apply for funding from CoARA	Prepare and submit an application for the second call for	Open Research Support	From Dec. 2024
Boost Cascade Calls	CoARA Boost Cascade funding to strengthen our CoARA operational capacity	Unit, Research Impact Lead	
Experiment with the capacity and	Experiment with the capacity and capabilities of systems	R&I Common Services Unit,	Ongoing
capabilities of our systems	such as ARGOS and PURE for recording and reporting	Open Research Support	
	research activities, e.g. through API integrations,	Unit	
	customisations		
Evaluate resource expansion	Recognising that our commitments under CoARA wll require	VPRI, Open Research	Q1 2026
options and lobby for funding	a new approach in how we support our researchers, we will	Support Unit	
	submit a request for funding to recruit additional staff to		
	sustain our CoARA efforts within the university		
Investigate inclusion in the new	Investigate how rankings such as Open Leiden may be use to	Open Research Support	Q3 2025
Open Leiden ranking	better support and highlight the breadth of our research	Unit	
	activities		

